

Amendments To The Claims:

Please amend the claims as shown.

1 – 25 (canceled)

26. (new) A temperature resistant layered structure, comprising:
a substrate; and
a porous layer arranged on the substrate having a pore defined by a wall, and a ceramic
coating on an interior surface of the wall.

27. (new) The layered structure of claim 26, wherein the layered structure is exposed
to a temperature between 1000°C and 1600 °C.

28. (new) The layered structure as claimed in claim 26, wherein the substrate is
metallic or ceramic.

29. (new) The layered structure as claimed in claim 26, wherein the porous layer is in
a foam or a sponge form.

30. (new) The layered structure as claimed in claim 26, further comprising an
intermediate layer interposed between the substrate and the porous layer.

31. (new) The layered structure as claimed in claim 26, wherein the ceramic coating
is ZrO₂, or Y₂O₄-ZrO₂.

32. (new) The layered structure as claimed in claim 26, wherein the substrate and the
porous layer comprise different materials.

33. (new) The layered structure as claimed in claim 26, wherein the porous layer has
a plurality of pores, each pore having the ceramic coating on the interior surface of the wall.

34. (new) The layered structure as claimed in claim 26, wherein a ceramic coating is arranged on a surface region of the porous layer that is in contact with a hot working medium.

35. (new) The layered structure as claimed in claim 26, wherein the porous layer comprises MC_xAl_y, where M is selected from the group consisting of iron, cobalt or nickel, and X is the element yttrium and/or a rare earth element.

36. (new) The layered structure as claimed in claim 26, wherein the porous layer is soldered, welded or adhesively bonded to the substrate, and the ceramic coating is applied to the pore by dip-coating, layer build-up or plasma spraying.

37. (new) A layered turbine component arrangement, comprising:
a substrate having a cooling passage adapted to allow a cooling gas medium to pass through the substrate; and
a porous layer arranged on the substrate, the porous layer having cooling passages formed by gas-permeable inter-connections between pores in the porous layer.

38. (new) The turbine component arrangement of claim 37, wherein the cooling gas medium enters and exits adjacent pores that collectively form the porous layer cooling passages.

39. (new) The turbine component arrangement of claim 37, wherein the inter-connections are located along adjacent pores.

40. (new) The turbine component arrangement of claim 37, wherein at least one porous layer cooling passage is generally perpendicular to either the surface of the substrate or the porous layer.

41. (new) The turbine component arrangement of claim 37 wherein a pore located nearer the outer surface of the layer is smaller than a pore located nearer the substrate.

42. (new) The turbine component arrangement of claim 41 wherein a majority of the pores located nearer the outer surface of the layer are smaller than the pores located nearer the substrate.

43. (new) The turbine component arrangement of claim 37 wherein the cooling gas medium emerges from a surface region of the porous layer that is in contact with a hot working medium.

44. (new) The turbine component arrangement of claim 37 wherein the porous layer is not gas permeable along a surface region that is in contact with a hot working medium.

45. (new) The turbine component arrangement of claim 39 further comprising an intermediate layer interposed between the substrate and the porous layer.